

IFWO

RAW SEQUENCE LISTING

DATE: 08/30/2004

PATENT APPLICATION: US/10/773,530

TIME: 14:57:32

Input Set: N:\Crf3\RULE60\10773530.raw.txt
Output Set: N:\CRF4\08302004\J773530.raw

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1 <110> APPLICANT: Cox III, George N
         Bolder Biotechnology, Inc.
 3 <120> TITLE OF INVENTION: Derivatives of Growth Hormone and Related Proteins
 4 <130> FILE REFERENCE: 4152-1-PUS
 5 <140> CURRENT APPLICATION NUMBER: US/10/773,530
 6 <141> CURRENT FILING DATE: 2004-02-05
 7 <150> PRIOR APPLICATION NUMBER: US/10/400,377
                                                  State of the property of the state of
 8 <151> PRIOR FILING DATE: 2003-03-26
 9 <150> PRIOR APPLICATION NUMBER: US/09/462,941
10 <151> PRIOR FILING DATE: 2000-01-14
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11 <150> PRIOR APPLICATION NUMBER: 60/052,516
12 <151> PRIOR FILING DATE: 1997-07-14
13 <160> NUMBER OF SEQ ID NOS: 41
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[18]
14 <170> SOFTWARE: PatentIn Ver. 2.0
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17 <211> LENGTH: 191
18 <212> TYPE: PRT
19 <213> ORGANISM: Homo sapiens
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22
23
           Ala His Arg Leu His Gln Leu Ala Phe Asp Thr Tyr Gln Glu Phe Glu
24
25
           Glu Ala Tyr Ile Pro Lys Glu Gln Lys Tyr Ser Phe Leu Gln Asn Pro
26
                                         40
27
           Gln Thr Ser Leu Cys Phe Ser Glu Ser Ile Pro Thr Pro Ser Asn Arq
28
29
           Glu Glu Thr Gln Gln Lys Ser Asn Leu Glu Leu Leu Arg Ile Ser Leu
30
                                70
                                                     75
31
           Leu Leu Ile Gln Ser Trp Leu Glu Pro Val Gln Phe Leu Arg Ser Val
32
                                                 90
33
           Phe Ala Asn Ser Leu Val Tyr Gly Ala Ser Asp Ser Asn Val Tyr Asp
34
                       100
                                           105
35
           Leu Leu Lys Asp Leu Glu Glu Gly Ile Gln Thr Leu Met Gly Arg Leu
36
                                        120
           Glu Asp Gly Ser Pro Arg Thr Gly Gln Ile Phe Lys Gln Thr Tyr Ser
37
38
                                   135
                                                        140
39
           Lys Phe Asp Thr Asn Ser His Asn Asp Asp Ala Leu Leu Lys Asn Tyr
40
                               150
                                                    155
41
           Gly Leu Leu Tyr Cys Phe Arg Lys Asp Met Asp Lys Val Glu Thr Phe
42
                           165
                                               170
43
           Leu Arg Ile Val Gln Cys Arg Ser Val Glu Gly Ser Cys Gly Phe
                                            185
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48 <212> TYPE: PRT
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50 <400> SEQUENCE: 2
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           Leu Glu Ala Lys Glu Ala Glu Asn Ile Thr Thr Gly Cys Ala Glu His
53
54
55
           Cys Ser Leu Asn Glu Asn Ile Thr Val Pro Asp Thr Lys Val Asn Phe
56
                                         40
57
           Tyr Ala Trp Lys Arg Met Glu Val Gly Gln Gln Ala Val Glu Val Trp
58
           Gln Gly Leu Ala Leu Leu Ser Glu Ala Val Leu Arg Gly Gln Ala Leu
59
                                70
60
61
           Leu Val Asn Ser Ser Gln Pro Trp Glu Pro Leu Gln Leu His Val Asp
62
63
           Lys Ala Val Ser Gly Leu Arg Ser Leu Thr Thr Leu Leu Arg Ala Leu
64
                                            105
65
           Gly Ala Gln Lys Glu Ala Ile Ser Pro Pro Asp Ala Ala Ser Ala Ala
66
                                        120
           Pro Leu Arg Thr Ile Thr Ala Asp Thr Phe Arg Lys Leu Phe Arg Val
67
68
                                   135
                                                        140
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70
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72
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76 <212> TYPE: PRT
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81
82
                                             25
                        20
           Arg His Asp Phe Gly Phe Pro Gln Glu Glu Phe Gly Asn Gln Phe Gln
83
84
           Lys Ala Glu Thr Ile Pro Val Leu His Glu Met Ile Gln Gln Ile Phe
85
                                     55
86
           Asn Leu Phe Ser Thr Lys Asp Ser Ser Ala Ala Trp Asp Glu Thr Leu
87
88
           Leu Asp Lys Phe Tyr Thr Glu Leu Tyr Gln Gln Leu Asn Asp Leu Glu
89
                                                 90
90
                            85
           Ala Cys Val Ile Gln Gly Val Gly Val Thr Glu Thr Pro Leu Met Lys
91
92
           Glu Asp Ser Ile Leu Ala Val Arg Lys Tyr Phe Gln Arg Ile Thr Leu
93
94
                                        120
           Tyr Leu Lys Glu Lys Lys Tyr Ser Pro Cys Ala Trp Glu Val Val Arg
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0.6			120					125					140				
96	*	71.	130	T10	Mot	7.20	Cor	135	Cor	T OIL	Cor		140	T 011 /	~1 ~ <i>(</i>	~1.,	Cor
97			Gru	Ile	Mec	_		Pile	ser	пец			ASII	ьец (GIII (
98 .		145	7. ~~~	Com	T		150					155					160
99		ьeu	Arg	Ser	гуя												
100	010	G.T.O				165											
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109		Lei	ı Leı	ı Ala			Ser	Arg	Ile			Ser	Ser	Cys		Met	Asp
110					20					25					30		_
111		Arg	g His	s Asp		Gly	Phe	Pro			Glu	Phe	Asp	Gly	Asn	Gln	Phe
112				35					40					45			
113		Gli	n Lys	s Ala	Pro	Ala	Ile	Ser	Val	Leu	His	Glu	Leu	Ile	Gln	Gln	Ile
114			50)				55					60				
115		Phe	e Asr	ı Leu	Phe	Thr	Thr	Lys	Asp	Ser	Ser	Ala	Ala	Trp	Asp	Glu	Asp
116		6!	5				70					75					80
117		Lei	ı Leı	ı Asp	Lys	Phe	Cys	Thr	Glu	Leu	Tyr	Gln	Gln	Leu	Asn	Asp	Leu
118						85					90					95	
119		Glı	ı Ala	a Cys	Val	Met	Gln	Glu	Glu	Arg	Val	Gly	Glu	Thr	Pro	Leu	Met
120					100	l				105					110		
121		Ası	n Ala	a Asp	Ser	lle	Leu	Ala	. Val	Lys	Lys	Tyr	Phe	Arg	Arg	Ile	\mathtt{Thr}
122				115					120					125			
123		Let	ı Tyr	Leu	Thr	Glu	Lys	Lys	Tyr	Ser	Pro	Cys	Ala	Trp	Glu	Val	Val
124			130)				135					140			•	
125		Arc	g Ala	a Glu	Ile	Met	Arg	Ser	Leu	Ser	Leu	Ser	Thr	Asn	Leu	Gln	Glu
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137		Cys	s Glr	Lys	Leu	Leu	Trp	Gln	Leu	Asn	Gly	Arq	Leu	Glu	Tyr	Cys	Leu
138		-		-	20		_			25					30	-	
139		Lys	s Asp	Arg	Met	Asn	Phe	Asp	Ile	Pro	Glu	Glu	Ile	Lys	Gln	Leu	Gln
140		4		35				_	40					45			
141		Gli	n Phe	Gln		Glu	Asp	Ala			Thr	Ile	Tyr		Met	Leu	Gln
142			50		-1			55					60				
143		Ası		Phe	Ala	Ile	Phe			Asp	Ser	Ser		Thr	Glv	Tro	Asn
144		65					70	_		P		75			1		80
145				: Ile	Val	Glu			T.e.11	Δla	Agn		Tur	Hic	Gln	Tle	
146		01(~ ****		• 44	85	11011	Lea	u	111 CI	90		- y -	1110	U111	95	11011
-10						03					20					23	

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            His Leu Lys Thr Val Leu Glu Glu Lys Leu Glu Lys Glu Asp Phe Thr
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149
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150
                    115
                                                              125
            Ile Leu His Tyr Leu Lys Ala Lys Glu Tyr Ser His Cys Ala Trp Thr
151
                                     135
152
            Ile Val Arg Val Glu Ile Leu Arg Asn Phe Tyr Phe Ile Asn Arg Leu
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161 <213> ORGANISM: Homo sapiens
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165
166
                                              25
            Glu Lys Leu Cys Ala Thr Tyr Lys Leu Cys His Pro Glu Glu Leu Val
167
168
                                          40
            Leu Leu Gly His Ser Leu Gly Ile Pro Trp Ala Pro Leu Ser Ser Cys
169
170
            Pro Ser Gln Ala Leu Gln Leu Ala Gly Cys Leu Ser Gln Leu His Ser
171
172
173
            Gly Leu Phe Leu Tyr Gln Gly Leu Leu Gln Ala Leu Glu Gly Ile Ser
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174
            Pro Glu Leu Gly Pro Thr Leu Asp Thr Leu Gln Leu Asp Val Ala Asp
175
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176
                        100
177
            Phe Ala Thr Thr Ile Trp Gln Gln Met Glu Glu Leu Gly Met Ala Pro
178
                                         120
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180
            Gln Arg Arg Ala Gly Gly Val Leu Val Ala Ser His Leu Gln Ser Phe
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                                              25
            His Pro Leu Pro Thr Pro Val Leu Leu Pro Ala Val Asp Phe Ser Leu
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196
197
            Gly Glu Trp Lys Thr Gln Met Glu Glu Thr Lys Ala Gln Asp Ile Leu
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Input Set: N:\Crf3\RULE60\10773530.raw.txt
Output Set: N:\CRF4\08302004\J773530.raw

198			50					55					60				
199	•	Clu		นาไ	Thr	T 011	Leu		Glu	Clar	17 a 1	Mo+	60 71-	717	71 200	Clar	Gln
200		65	Ата	vai	1111	цец	70	пец	Giu	Gry	. Vai	75	міа	міа	hry	СТУ	80
201			Clv	Dro	Thr	Cvc	Leu	Car	Sor	T.011	T.011		Gln	LOU	Cor	Clv	
201		шeu	GIY	FLO	1111	85	пец	DET	Ser	пеа	90	Gry	GIII	пеα	Ser	95	GIII
		17 n 1	71 25 05	T 011	Ton		Gly	ת ד ת	T 011	Cln		T 011	T 011	Clar	Thr		T 011
203		val	Arg	пей	100	ьец	GIY	нта	пеп	105	PCI	пеп	ьеи	GIY	110	GIII	цец
204 205		Dro	Dro	'Cln		7.200	Thr	Thr	λla		Larc	Λαn	Dro	Λcn		Tla	Dhe
206		FIO	FIO	115	СТУ	Arg	1111	1111	120		цуз	Mah	FIO	125	ліа	116	FIIC
		Lou	Cor		Gln	цiс	Leu	Lou			Larc	TeV.	λνα		T.OU	Mot	T.011
20 7 208		цец	130	FIIC	GIII	птъ	пец	135	Arg	GIA	цуъ	vai	140	FIIC	пец	Mec	пец
209		Wal.		Glv	Cor	Thr	Leu		7727	λrα	λrα	תות		Dro	Thr	Thr	λla
210		145	GIY	Gry	DCT	1111	150	СуБ	vai	лгу	Arg	155	FIO	FIO	1111	1111	160
211			Dro	Sor	λκα	Thr	Ser	Lou	V-1	T.011	Thr		Λαn	G111	T.011	Dro	
212		vai	FIO	Ser	rig	165	DCI	пеа	vai	пец	170	пси	Abii	GIU	ьец	175	ASII
213		7) recr	Thr	Cor	Clar		Leu	G111	Thr	Λcn		Thr	Nlα	cor	λla		Thr
214		Arg	1111	DCI	180	пец	пеа	GIU	1111	185	riie	1111	лια	Der	190	nr 9	1111
215		Thr	Clar	cor		T 011	Leu	Tarc	Trn		Cln	Clar	Dho	λνα		Luc	т1д
216		1111	GIY	195	СТУ	БСи	шец	цуБ	200	GIII	GIII	Gry	1110	205	ALG	цур	110
217		Dro	Clar		Lou	7 cn	Gln	Thr		λrα	Cor	Leu	Acn		Tla	Dro	Glv
218		FIO	210	пец	пец	ASII		215	DCI	AL 9	DCI	пси	220	OIII	110	110	Gry
219		Tur		Δen	Δrα	Tle	His		T.e11	T.e.11	Δen	Glv		Δra	Glv	T.e.11	Phe
220		225	пси	ADII	rig	110	230	Olu.	ncu	пси	11511	235	1111	g	OLY.	пси	240
221			Glv	Pro	Ser	Δrα	Arg	Thr	T.e11	Glv	Δla		Δsn	Tle	Ser	Ser	
222			G ± y	110	DCI	245	9		шец	01	250		1100			255	U 1
223		Thr	Ser	Asn	Thr		Ser	Len	Pro	Pro		Len	Gln	Pro	Glv		Ser
224			,	пор	260	011	501	200	110	265	11011	200	0111	110	270	-1-	DO1
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226				275					280	0-1	<u>-1</u>	-1-		285			
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228			290					295					300				
229		Asp		Ser	Ala	Pro	Thr		Thr	Pro	Thr	Ser		Leu	Leu	Asn	Thr
230		305					310					315					320
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VERIFICATION SUMMARY

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